REMARKS

Claims 1-33 and 35-39 were examined by the Office, and in the Office Action of July 17, 2008 all claims are rejected. With this response claims 1, 9-10, 12, 18, 32, 35, 38-39 are amended, and claims 6-8, 11, 20, 33-34 and 36 are cancelled. All amendments are fully supported by the specification as originally filed. Support for the amendments can be found at least from cancelled claims 6-8 and 20, as well as paragraphs [0174]-[0176], [0287]-[0289] and [0294] of Published Application No. 2006/0217990 corresponding to the present application. Applicant respectfully request reconsideration and withdrawal of the rejections in view of the following discussion.

This response is submitted along with a Request for Continued Examination (RCE).

Claim Rejections Under § 103

In section 5, on page 4 of the Office Action, claims 1-5, 13, 17, 27-28, 30-35, 37 and 39 are rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner et al. (U.S. Patent No. 6,741,996) in view of Spriestersbach et al. (U.S. Appl. Publ. No. 2003/0148773). Claim 1 is amended to include limitations from cancelled claims 6-8, and therefore applicant respectfully submits that the cited references fail to disclose or suggest all of the limitations recited in claim 1, as amended.

In section 6, on page 22 of the Office Action, claims 6-9, 11-12, 29 and 36 are rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner in view of Spriestersbach, and in further view of Vronay et al. (U.S. Appl. Publ. No. 2003/0156138). As mentioned above, claim 1 is amended to include the limitations from claims 6-8, and therefore the rejection of claims 6-8 will be addressed with respect to claim 1. Applicant respectfully submits that claim 1 is not disclosed or suggested by the cited references, because the cited references, alone or in combination, fail to disclose or suggest all of the limitations recited in claim 1. The cited references at least fail to disclose or suggest obtaining a first time information in accordance with said user provided information, obtaining one or more calendar entries included in said calendar information, wherein each calendar entry comprises a second time information with a start time and an end time, matching said first time information and each of said second time information by assigning a membership function to said second time information, wherein said membership function is a function in time, which rises from zero value at a predetermined moment in time before said

14

start time of each calendar entry and becomes zero value at a predefined moment in time after said end time of each calendar entry, and deriving a membership grade value from said membership function in accordance with said first time information, and obtaining meta-information from each matching calendar entry of said one or more obtained calendar entries, as recited in amended claim 1. As mentioned above, claim 1 is amended to include the limitations from claim 6, and on page 23 of the Office Action the Office acknowledges that Brechner and Spriestersbach fail to disclose the limitations of claim 6 and relies upon Vronay for this teaching.

Vronay describes a calendar-based interface system which may be implemented as software that is stored on and executed by one or more computers such as a handheld device or digital cellular device. See Vronay paragraph [0022]. The system activity monitor (102) may obtain information about the objects with which a computer interacts, determine whether the objects are new or unique relative to other objects listed in calendar system database (104), e.g. based upon a unique object identifier, and aggregate or store the activities in the calendar system database (104) in association with the unique object identifier of the object. See Vronay paragraph [0026]. Vronay further describes a similarity system (106) which may be implemented as one or more programs, for a given target file and a collection of other files, return a similarity ranking between them. See Vronay paragraph [0028]. The association or similarities may relate to objects or files having shared content, occurring at similar times or similar computer locations, being sent to or received from a common person, are linked together. See Vronay paragraph [0029].

However, Vronay does not describe nor suggest a reliable methodology how to obtain reliable and user-informative values of similarity. The present application describes a reliable and analytic methodology using calendar entries. As defined in amended claim 1, and described in paragraphs [0174] to [0176] on page 14 of the present invention, a well-defined membership function is provided. Each calendar entry of the calendar system as described in the present application comprises a second time information [i.e. a time period] with a start time and an end time. The membership function is a function in time. The membership function rises from zero value at a predetermined moment in time <u>before a start time of each calendar entry</u> and the membership function becomes zero value at a predefined moment in time <u>after said end time of each calendar entry</u>. This means that the second time information associated with the calendar

entries is provided with a pre- and post-period of time, whereas the first time information associated with the user provided information remains unmodified.

A reliable and analytic membership grade value is then derived from the membership function in accordance with the [unmodified] first time information, whereas the pre- and post-period of time defined with respect to the second time information ensures that the derived membership grade value represents a reliable and analytic measure of the time similarity (i.e. the closeness in time) of the first time information in relationship to the second time information (i.e. the calendar entry time information). However, such a well-defined membership function is neither described nor suggested by Vronay. Instead, Vronay remains unspecific how to implement the similarity system (106) described for instance in paragraphs [0028] and [0029].

Independent claims 35 and 39 are amended to contain limitations similar to those recited in claim 1. Therefore, for at least the reasons discussed above in relation to claim 1, claims 35 and 39 are not disclosed or suggested by the cited references

The dependent claims rejected above are not disclosed or suggested by the cited references at least in view of their dependencies.

In section 7, on page 29 of the Office Action, claim 10 is rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner in view of Spriesterbach and Vronay, and further view of Gupta et al. (U.S. Patent No. 6,484,156). The dependent claim rejected above is not disclosed or suggested by the cited references at least in view of their dependencies.

In section 8, on page 31 of the Office Action, claim 14 is rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner in view of Spriesterbach, and in further view of Asazu (U.S. Appl. Publ. No. 2001/0049691). The dependent claim rejected above is not disclosed or suggested by the cited references at least in view of their dependencies.

In section 9, on page 33 of the Office Action, claims 15-16 are rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner in view of Spriestersbach, and in further view of Gupta. The dependent claims rejected above are not disclosed or suggested by the cited references at least in view of their dependencies.

In section 10, on page 34 of the Office Action, claims 18, 20, 23 and 38 are rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner in view of Spriestersbach, and in further view of Tecu et al. (U.S. Appl. Publ. No. 2004/0034655). Claims 18 and 38 are amended to be in independent form. Claim 18 is amended to include limitations from claim 1 and claim 20. Applicant respectfully submits that claim 18 is not disclosed or suggested by the cited references, because the cited references, alone or in combination, fail to disclose or suggest all of the limitations recited in claim 18. The Office acknowledges that Brechner and Spriestersbach fail to disclose or suggest all of the limitations recited in claims 18 and 20 (now incorporated into claim 18), and relies upon Tecu for these teachings.

Tecu discusses that generally, one or more human-inaudible or human-imperceptible frequencies (62) are selected for encoding metadata (40) such that the encoded metadata (40) does not detrimentally affect audio data (34) audible to human hearing. See Tecu paragraph [0017]. Furthermore, encoder routine (26) may encode metadata (40) at a frequency (62) generally inaudible or imperceptible to human hearing such that the encoded metadata (40) does not detrimentally affect audio data (34) audible to human hearing. For example, metadata (40) may be encoded at a frequency (62) of approximately 20 kHz or greater, thereby rendering the encoded metadata (40) inaudible to human hearing. See Tecu paragraph [0019]. Tecu further describes that the encoder (26) may encode metadata (40) by generating a bit pattern at one or more desired inaudible frequencies (62). See Tecu paragraph [0023]. Moreover, Tecu describes that at step (116), encoder routine (26) designates metadata (40) to be encoded at each of the selected frequencies (62). For example, each type of metadata (40) to be included in the particular data stream (32) may be encoded at each of a plurality of designated frequencies (62). Therefore, <u>subject data (42) may be encoded at a particular frequency (62) and location data (44) may be encoded at another frequency (62)</u>. See Tecu paragraph [0028].

The present invention also suggests the use of several frequency ranges but the present invention does not use the different frequency ranges to separate the meta-information to be coded in accordance with any subject thereof. As recited in amended claim 18, a set of code bases are provided. Each code base comprises a pre-defined number of pre-defined frequencies. The set of code bases represents a plurality of coding symbols. The coding symbols represent a character and symbol code table, which allows for coding the meta-information. A detailed example thereof is described for instance in paragraphs [0287] and [0288] of the present

application. Further, it is claimed in amended claim 18 that the set of code bases is defined within a first frequency range, and the first frequency range is one frequency range of a plurality of frequency ranges forming a total frequency range being applicable to the user provided audio information. This means that by using the code bases representing the coding symbols, the meta-information can be completely embedded into the user provided audio information. At this point, the embedding of the meta-information into the user provided audio information might be successfully completed. However, the present invention as defined in amended claim 18 further defines that the set of code bases is additionally mapped into at least one further frequency range of the total frequency range applicable to the user provided audio information and the meta-information is mapped in accordance with the plurality of coding symbols into the first frequency range, and the at least one further frequency range thereby obtaining redundancy, i.e. redundant information within each frequency range applied in the described method.

The present invention describes a methodology, which does not use frequencies, which are inaudible or imperceptible to human hearing. Rather, the present invention as defined in amended claim 18 allows using frequencies, which are audible or perceptible to human hearing. Because the redundant coding allows for coding within frequency ranges, which are audible or perceptible to human hearing, by using low intensity levels for the pre-defined frequencies. The redundant coding ensures that a decoding is still possible despite of the low intensity levels. Thereby an exemplary advantage might be understood therein that an embedding of meta-information according to amended claim 18 is not subjected to loss during audio transcoding, audio processing etc., in particular including filtering of inaudible or imperceptible audio frequencies such as known from lossy audio compression algorithms using psychoacoustic models.

Claim 38 is amended to include limitations similar to those recited in claim 18, and therefore is not disclosed or suggested by the cited references for at least the reasons discussed above with respect to claim 18.

The claims depending from claims 18 and 38 are also not disclosed or suggested by the cited references at least in view of their dependencies.

In section 11, on page 38 of the Office Action, claims 19, 21-22, 24 and 26 are rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner in view of Spriesterbach and Tecu, and

in further view of Tsuruoka (U.S. Patent No. 6,192,056). The dependent claims rejected above are not disclosed or suggested by the cited references at least in view of their dependencies.
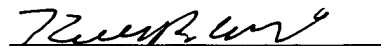
In section 12, on page 44 of the Office Action, claim 25 is rejected under 35 U.S.C. § 103(a) as unpatentable over Brechner in view of Spriestersbach, Tecu and Tsuruoka, and in further view of Levy et al. (U.S. Appl. Publ. No. 2002/0031240). The dependent claim rejected above is not disclosed or suggested by the cited references at least in view of their dependencies.

Conclusion

For at least the foregoing reasons, the present application is believed to be in condition for allowance, and such action is earnestly solicited. The undersigned hereby authorizes the Commissioner to charge Deposit Account No. 23-0442 for any fee deficiency required to submit this response.

Respectfully submitted,

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